

Title (en)
COMPRESSION AND COMPRESSED INVERSION OF INTERACTION DATA

Title (de)
KOMPRIMIERUNG UND KOMPRIMIERTER INVERSION VON INTERAKTIONSDATEN

Title (fr)
COMPRESSION ET INVERSION COMPRIMEE DE DONNEES D'INTERACTION

Publication
EP 1249073 B1 20050601 (EN)

Application
EP 00984382 A 20001214

Priority

- US 0033915 W 20001214
- US 17545400 P 20000110
- US 20114900 P 20000502
- US 67672700 A 20000929

Abstract (en)
[origin: US7742900B1] A compression technique compresses interaction data. A fast method processes the compressed data without the need to first decompress the data. In one embodiment, the compression technique is used to compress data in an interaction matrix. The interaction matrix (such as a moment method impedance matrix) contains interaction data between sources (e.g., basis functions or expansion functions) and testers (e.g., testing functions). The sources are collected into groups of sources according to specified criteria. One useful criteria is based on grouping sources relatively close to one another. For each group of sources, a composite source is calculated. The testers are also collected into groups and composite testers are calculated. The use of composite sources and composite testers to compute couplings when the source and tester are not close to each other allows the interaction matrix to be computed as a sparse matrix with a block format.

IPC 1-7
H03M 7/30

IPC 8 full level
H03M 7/30 (2006.01)

CPC (source: EP US)
H03M 7/30 (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0152422 A1 20010719; AT E297073 T1 20050615; AU 2100801 A 20010724; DE 60020603 D1 20050707; DE 60020603 T2 20060504; EP 1249073 A1 20021016; EP 1249073 B1 20050601; US 2006195306 A1 20060831; US 2006265200 A1 20061123; US 7742900 B1 20100622

DOCDB simple family (application)
US 0033915 W 20001214; AT 00984382 T 20001214; AU 2100801 A 20001214; DE 60020603 T 20001214; EP 00984382 A 20001214; US 41742906 A 20060503; US 41755906 A 20060503; US 67672700 A 20000929